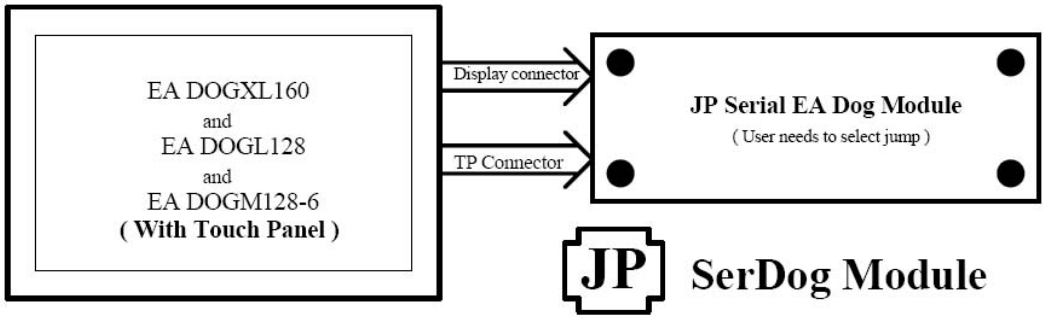
JP Serial Dog LCD with TP Module

JP serial EA Dog LCD with Touch Panel module is a simple and cost effective interface controller module. It will work with any microcontroller capable of accepting asynchronous serial data. User can connect EA DogXL160, EA DogM128 and EA DogL128 to the module directly.

SPECS:

Power:	3.3V VDC
Size:	65mm x 30mm
Baud Speed:	4800, 9600, 19200 and 38400



Not for commercial use. Hobbyist and Educational use only.

Baud speed select: (x = connected**)**

Jump1	Jump2	Baud Speed
		4800
x		9600
	x	19200
x	x	38400

JP Dog LCD 160x104 or 128x64 select

Jump3	LCD Mode
	160x104
x	128 x 64

JP Serial EA DOG LCD with Touch Panel Module Operate Commands:

Note: These commands are for 160 x 104 and 128 x 64

Command(hex)	Command (Dec)	Description	Parameter
$20	32	Copy buffer to screen	None
$21	33	Clear screen	None
$22	34	Touch Panel Calibration	Return 34
$23	35	Show TP XY Reading	Return 35
$24	36	Show LCD XY Reading	Return 36
$25	37	Show TP Pressure	Return 37
$26	38	Road default Parameters	None
$27	39	Send TP Data On	None
$28	40	Send TP Data Off (default)	None
$29	41	Paint function	Return 41
$2A	43	Exit User Paint Function	None
$32	50	Back LED Lights On (default)	None
$33	51	Back LED Lights Off	None
$34	52	Adjust LCD Contrast to dark	Step 1
$35	53	Adjust LCD Contrast to bright	Step 1
$36	54	Adjust Touch Panel Threshold to high	Step 2
$37	55	Adjust Touch Panel Threshold to low	Step 2
$38	56	Load image to LCD	None
$39	57	Copy Screen to user's MCU	None
$3A	58	Copy Screen to user's MCU with common	None
$3B	59	Turn TP Button Function On	None
$3C	60	Turn TP Button Function Off	None
$3D	61	Turn TP Round Button Function On	None
$3E	62	Turn TP Round Button Function Off	None
$3F	63(+1 byte)	Fill screen	None
$44	68	Disable JP Logo	None
$45	69	Clear Uart Buffer	None
$46	70	Draw a Line (x0, y0, x1,y1, color)	None
$47	71	Draw a H Line (x0, x1, y, color)	None

$48	72	Draw a V Line (x, y0, y, color)	None
$49	73	Draw a Circles (x, y, r, color)	None
$4A	74	Draw a Fill Circles (x, y, r, color)	None
$4B	75	Draw a Square(x, y, L, color)	None
$4C	76	Draw a Fill Square(x, y, L, color)	None
$4D	77	Draw a Rectangle(x0, y0, x1, y1, color)	None
$4E	78	Draw a Fill Rectangle(x0, y0, x1, y1, color)	None
$4F	79	Draw a Round Edges Rectangle(x0, y0, x1, y1, color)	None
$50	80	Draw a Fill Round Edges Rectangle(x0, y0, x1, y1, color)	None
$51	81	Draw a Ellipse(x, y, xr, yr, color)	None
$52	82	Draw a fill Ellipse(x, y, xr, yr, color)	None
$53	83	User create paint area (x, y, x1, y1)	None
$5B	91	Paint pen size x1 (1 pix)	None
$5C	92	Paint pen size x2	None
$5D	93	Paint pen size x3	None
$64	100	Write a 16x24 Segment number (x, y, num, color)	None
$65	101	Write a 18x32 Segment number (x, y, num, color)	None
$66	102	Write a 28x48 Segment number (x, y, num, color)	None
$67	103	Write a 36x64 Segment number (x, y, num, color)	None
$6E	110	Write single 8x8 character (x, y, char, color)	None
$6F	111	Write single 12x16 character (x, y, char, color)	None
$70	112	Write single 13x24 character (x, y, char, color)	None
$71	113	Write single 19x32 character (x, y, char, color)	None
$72	114	Write single 24x48 character (x, y, char, color)	None
			None
$78	120	Write 8x8 string test (x, y, color, space, string) + end **	None
$79	121	Write 12x16 string test (x, y, color, space, string) + end **	None
$7A	122	Write 13x24 string test (x, y, color, space, string) + end **	None
$7B	123	Write 19x32 string test (x, y, color, space, string)) + end **	None
$7C	124	Write 24x48 string test (x, y, color, space, string)) + end **	None
$8C	140	32 Band Chart Bar Function(Bar wide, bar top position, bar bottom position, bar data[32])	
$8D	141	16 Band Chart Bar Function(Bar wide, bar top position, bar bottom position, bar data[16])	
$96	150	Create TP Button(B#, x0, y0, x1, y1, color, wx, wy, txt)	Return B# *
$97	151	Create TP Round Button(B#, x0, y0, Rx, Ry, color, wx, wy, txt)	Return B# *

* Button number: number 0, return 48…… number 24, return 72. Button number Max number is 24.

* Round Button number: number 0, return 97……. number 24, return 121. Round Button number Max number is 24.
** End means end char. The end char < 30, module will know the string is end.

Note:

Paint function and user's paint function work good for 128x64 LCD. (Please Watch test video)

When you send command and data to the module, it needs a pause to process them without missing the next command and data.

JP Serial EA DOG LCD with Touch Panel Module integrated commands to a Pic18F26K22. User can use it very easy. Please read Pic18F26K22 and EA DOG LCD Datasheet first when you want to buy it.(www.microchip.com)

LIABILITY WARNING

This device should be used only for experimental purposes. It has NOT gone through extensive testing and it could erase or corrupt some or all data on media cards that are inside the device. You assume to take your own risk when you purchase this device, and release the responsibility and liability from the manufacturer with no harm.

REGULATORY WARNING

This device is intended solely for experimental purpose; it is not in finished product form and is NOT FCC approved. If you wish to install these modules into non-experimental final finished products, you will be responsible to have the modules approved by the FCC at your own cost.

Jianping Electronics
jp@jianpingusa.com
www.jianpingusa.com